

**INTEGRATED HUMAN RESOURCES INFORMATION SYSTEM (IHRIS)**  
**RICHMOND, VIRGINIA**

**SPECIAL REPORT**

**JUNE 26, 1998**

June 26, 1998

The Honorable James S. Gilmore, III  
Governor of Virginia

The Honorable V. Earl Dickinson  
Co-Chairman, House Appropriations Committee

The Honorable John H. Chichester  
Co-Chairman, Senate Finance Committee

The Honorable Vincent F. Callahan, Jr.  
Co-Chairman, House Appropriations Committee

The Honorable Stanley C. Walker  
Co-Chairman, Senate Finance Committee

Gentlemen:

We have reviewed the status and progress of the **Integrated Human Resources Information System** as required by the 1997 Appropriations Act. Our involvement in the project continues and we issued our previous report as of January 20, 1998.

- A new issue identified since our previous report involves minimizing project delays. Our January 1998 report stated that IHRIS would start deployment beginning the third quarter of 1998. Since that time the deployment start date has moved to the first quarter of 1999.

Several issues previously reported that still need close attention and timely resolution include:

- The Department of Information Technology, Department of General Services and Virginia Tech must cooperate with the IHRIS project team, and each other, to develop an established procedure that agencies can follow to have their connectivity with IHRIS resolved efficiently.
- The IHRIS project team must continue to identify and evaluate solutions to compensate for the lack of PeopleSoft password security.
- The IHRIS project team must be able to recruit and retain qualified technical staff if they expect to complete the project as scheduled.

In addition to issues identified in this report, the IHRIS project team, in collaboration with The Hunter Group, prepares periodic reports that detail the project status. The reports describe outstanding development items, results of performance tests, and the detailed master plan with estimated completion dates for individual tasks.

### CONCLUSION

The IHRIS project continues to proceed within budget. However, a delay of approximately three to six months has occurred in the project deployment to the payroll service bureau and other initial sites since the dates reported in our January 1998 report. The project is still at a critical stage where unforeseen problems could impact the deployment to initial sites and result in project overruns. Strong project management and agency cooperation continues to be imperative.

### EXIT CONFERENCE

We discussed this report with officials at the Department of Personnel and Training and the Department of Accounts on June 26, 1998.

AUDITOR OF PUBLIC ACCOUNTS

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## Review Activities

To review the progress of this project, we held and attended meetings with project management, consultants, and agency personnel. We have also compared project expenses to the budget and status of the project for reasonableness.

## Spending

The table below shows the IHRIS project budget compared to project costs.

<u>Category</u>	<u>Budget</u>	<u>Expenses as of May 1998</u>	<u>Budget Balance</u>
Software (PeopleSoft)	\$ 2,540,840	\$ 2,540,840	\$ -
Platform	2,958,760	578,544	2,380,216
Consulting	4,074,000	3,078,529	995,471
Training	540,000	163,864	376,136
Maintenance	2,772,437	769,175	2,003,261
Other	<u>316,866</u>	<u>571,754</u>	<u>(254,887)</u>
Total	<u>\$ 13,202,903</u>	<u>\$ 7,702,706</u>	<u>\$ 5,500,197</u>

Based on the progress of the project and activities undertaken, the expenses appear reasonable and within the anticipated budget.

## Implementation

The Department of Personnel and Training and the Department of Accounts are the lead agencies responsible for developing and implementing IHRIS. Personnel and Training has the project management responsibility while Accounts has the disbursement and accounting responsibility. In addition, the Virginia Community College System, the Departments of Transportation and Health, and Account's Payroll Service Bureau will participate as the initial sites for implementing IHRIS.

PeopleSoft delivered version 7.0 of their application in January 1998 and the lead agencies worked to implement the new release into the prototype. After completing the upgrade in May 1998, the lead agencies began testing working model 1 of IHRIS. Additional functionality such as interfaces will be added after testing, resulting in working model 2. The DOA Payroll Service Bureau will begin parallel testing working model 2 of the Human Resources module sometime during the first quarter of 1999 and working model 2 of the Payroll module at the beginning of the second quarter in 1999. If additional functionality is necessary, changes will be added to create working model 3. Once the working model is in production at the DOA Payroll Service Bureau, the other initial sites will begin using the Human Resources and Payroll modules.

The current plans call for deployment to other state agencies in stages. Since full deployment will not conclude until after January 1, 2000, the existing systems must be Year 2000 compliant. The Department of Accounts is working to install software to bring CIPPS Year 2000 compliant. Personnel and Training has made both of its systems Year 2000 compliant.

Before beginning deployment, a variety of infrastructure issues still require resolution. To assist with this aspect of the project, IHRIS lead agencies will use Renaissance Worldwide (parent company of The Hunter Group). During June through August 1998, Renaissance will deliver capacity guidelines, architectural recommendations, performance analysis, security recommendations, backup and recovery planning, and more. The IHRIS team will involve technical state employees at lead agencies and those responsible for the Capitol Campus Network, Network Virginia, and the Commonwealth Telecommunication Network (CTN) during the infrastructure development phase in an effort to foster understanding and cooperation.

## **Issues**

### Closely Monitor Project Delays

In our January 1998 report the IHRIS lead agencies predicted they would begin deploying IHRIS beginning the third quarter of 1998. In the six months since our last report, the deployment date has moved to the first quarter of 1999. While all deployment dates are estimates based on remaining project tasks, the lead agencies and Project Manager must take care to reduce further delays.

The project is still at a critical stage where unforeseen problems could further impact the deployment to initial sites and result in project overruns. Strong project management and agency cooperation continues to be imperative to the project momentum.

### Continue Cooperative Effort to Provide for Connectivity

Three networks exist that connect agencies throughout the Commonwealth: the Capitol Campus Network maintained by the Department of General Services, Network Virginia established by Virginia Tech, and the CTN managed by the Department of Information Technology (DIT). DIT is the service bureau that is housing the IHRIS servers and agencies may use any or all of the three networks to communicate with this server.

The Departments of Personnel and Training, and Accounts, as well as the initial sites, have had problems resolving connectivity issues when the problem appeared to involve more than one of the agencies managing a network. As the Commonwealth distributes IHRIS, all agencies will need a procedure to resolve their connectivity issues, no matter which networks the agency uses. Failure to address and support connectivity could significantly hinder the deployment of IHRIS.

### *Action Taken Since Last Report*

We understand that representatives of these networks will be working closely with the IHRIS team and Renaissance Worldwide to develop solutions to infrastructure issues. This work began in June 1998. The managing agencies must cooperate with Renaissance Worldwide and each other to identify their responsibilities and provide prompt solutions.

### Ensure Secure Environment

PeopleSoft applications have insufficient password controls. For example, users have unlimited password attempts, are never forced to change their password, and there is no logging of failed password attempts. In addition, the user may choose a password that is one character in length, such as a carriage return. Given the sensitivity and financial impact of the information to be maintained on IHRIS, the lead agencies need to continue to focus on identifying and evaluating compensating solutions available to address security, including third party software solutions, and implement them prior to initial agency deployment.

#### *Action Taken Since Last Report*

The IHRIS team recognizes inadequate password controls present in the PeopleSoft application. While software products are available that provide password control solutions, the IHRIS team does not expect to have a software solution in place before deploying IHRIS to the initial sites.

#### Maintain Qualified Technical Staff

The successful completion of any project relies on the agency's ability to hire and retain qualified technical people. On their third recruiting attempt, the lead agencies did hire a qualified Oracle database administrator for the IHRIS project. This individual stayed nine months, but resigned after receiving a better job offer.

Each resignation and hiring impacts the time for IHRIS completion. To reduce this impact, the lead agencies need to fill positions quickly and also be able to offer a qualified individual sufficient incentive to stay with the project. Nationally, as well as in the Richmond area, the ability to hire and retain technical staff is difficult. Yet, without qualified technical people, the Commonwealth will not be able to complete this and other critical system projects.

#### *Action Taken Since Last Report*

Efforts to fill the vacant Oracle database administrator (DBA) position with a qualified candidate have not been successful. Currently the plan is for a Unisys DBA from DIT to fill this position. While this individual has significant Unisys DBA experience, he has very minimal Oracle experience. Additionally, the pay grade for the statewide DBA job classification has not changed in fourteen years, however this does not reflect the current trend for individuals with Oracle knowledge.